

REPORT NO. [REDACTED]
CD NO.

25X1A

COUNTRY East Germany

DATE DISTR. 22 December 1952

SUBJECT East German Experiments with Ceramic
Cutting Edges

NO. OF PAGES 1

PLACE
ACQUIRED

NO. OF ENCLS.
(LISTED BELOW)

DATE OF
INFO.

25X1A

SUPPLEMENT TO 25X1X
REPORT NO.

Because of shortages of tool steel and especially high-speed steel in the GDR, attempts have been made to employ ceramic cutting edges for processing metals, a practice which is allegedly used successfully in the USSR. Thuringian porcelain factories, the Heschow works in Harnsdorf, for example, once famous for their hard, durable ceramic products, are once more producing good technical porcelain. Several months ago, Dr. Ing. (Ind) Richter of the Institute for Industrial Science and Standardization of the Technical College of Dresden conducted experiments with cutting plates (Schneideplättchen) of ceramic materials; the experiments were later performed for Minister of Machine Construction Gerhard Müller.

2. Contrary to East German press releases, the results of the experiments were not encouraging: the life of a ceramic cutting plate used for processing soft cast steel amounted to only 16 minutes; cutting edges used on brass, bronze, and light metal (Leichtmetalle) were also effective for a short time only. Ceramic cutting edges do find practical uses, however, in processing certain plastics such as bakelite. It will probably be some time, though, before such cutting edges can be used on cast steel, brass, bronze, and the like.

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